2014 Regional / State / Local Modelers Conference Salt Lake City, Utah

"A Non-Modelers Guide to PSD Modeling"

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Overview

- Background
- Document Development
- The Document
- Flow Charts
- Policies



Background



Background

- On November 26, 2012 District took over PSD permitting activities in the San Joaquin Valley
 - District SIP approved Rule 2410
- HECA project was transferred to District during its final stages
 - District started its review from the beginning



Background

- District had no PSD modeling guidance
 - Followed what was done by Region IX for other PSD project reviews
- Finalized HECA modeling in February of 2013



Document Development



Document Development

- In March of 2013 the need to have a better understanding of the PSD modeling requirements was identified.
 - To provide management with a better understanding of the complexities of PSD modeling compared to non-PSD permitting projects;
 - To identify what guidance/policies were needed to guide applicants through the PSD modeling process; and

Document Development

 To provide staff new to PSD modeling an overview of the process and a starting point to learn what are the requirements for each assessment.

Resources

- Puzzle Book
- EPA Regions / States
- EAB determinations
- Feedback

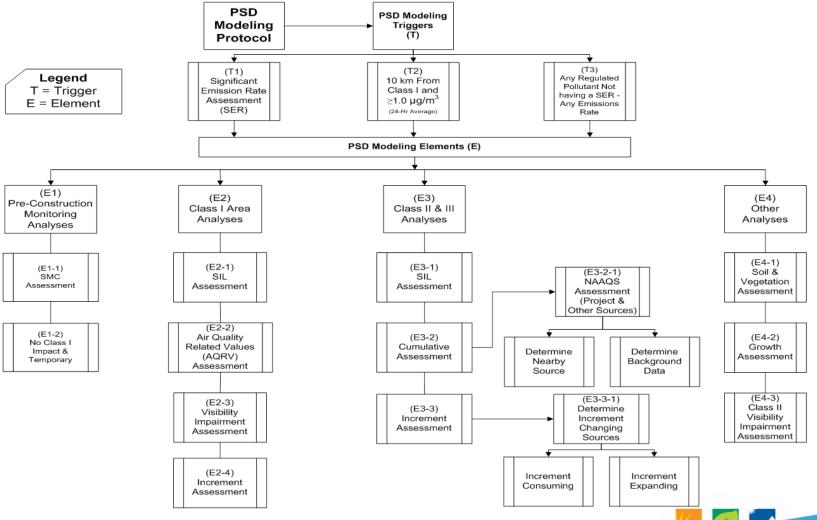


The Document "General PSD Modeling Requirements"

http://www.valleyair.org/busind/pto/Tox_Resources/General-PSD-Modeling-Requirements-Jan-2014-Rev3.pdf



The Document



Modeling Requirements



Requirements

- Pre-Construction Monitoring Analyses
 - SMC Assessment
- Class I Analyses
 - SIL Assessment
 - AQRV Assessment
 - Visibility Assessment
 - Increment Assessment (If required)



Requirements

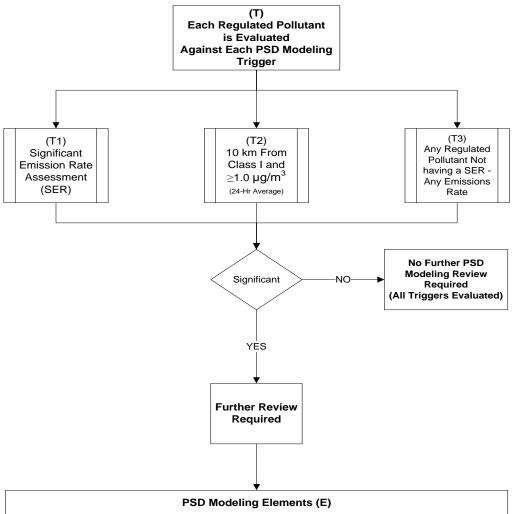
- Class II Analyses
 - SIL Assessment
 - Cumulative Assessment (if required)
 - Increment Assessment (if required)
- Other Analyses
 - Soil & Vegetation Assessment
 - Growth Assessment
 - Class II Visibility Assessment



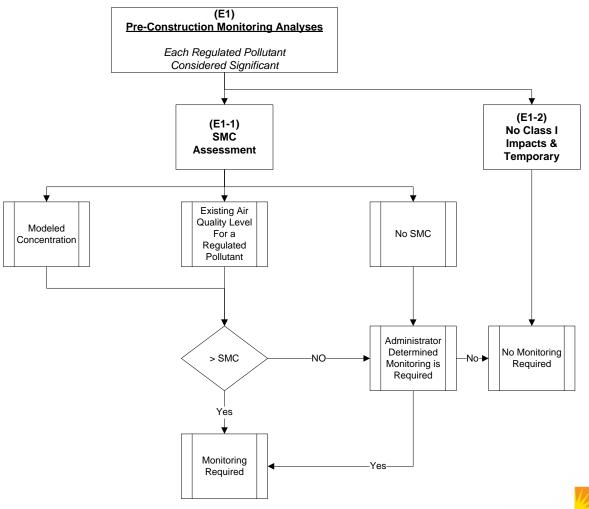
Flow Charts



Triggers



Pre-Construction Monitoring

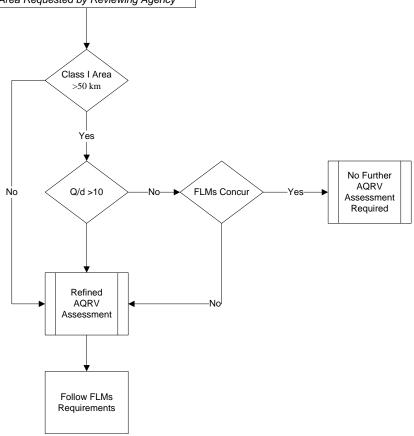




AQRV

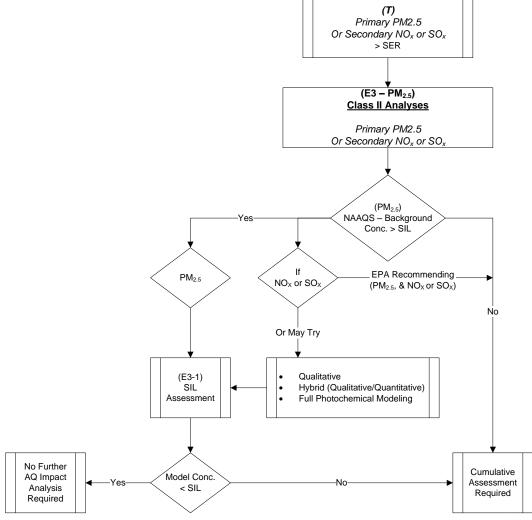
(E2-2) Class I AQRV Assessment

Each Regulated Pollutant Considered Significant and Near a Class I Area or Class I Area Requested by Reviewing Agency





PM 2.5 SIL



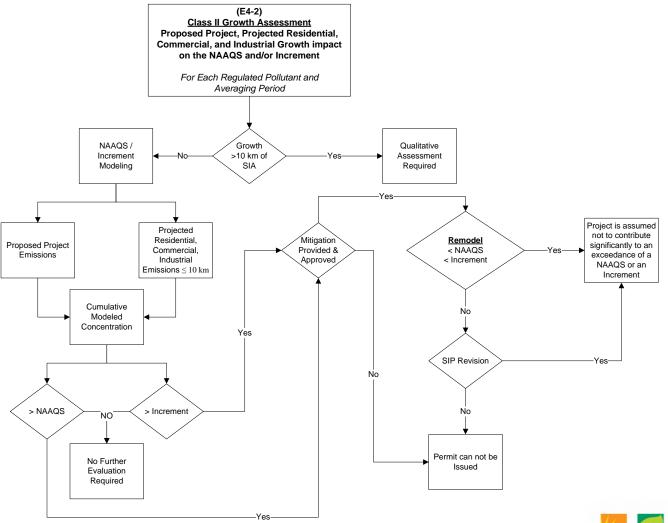
Increment

(E3-3) **Class II Increment Assessment** Each Regulated Pollutant Considered Significant and where the modeling Conc. was greater than >SIL Increment Assessment (3-3-1)Increment Consuming and **Expanding Sources** Proposed Nearby by Nearby Proposed Facility Major and Nearby Area Mobile Project (Current Minor Sources Sources Units) Sources Modeled Concentration Project is assumed Project Model Conc. Contribution not to cause or contribute to a > Increment to a Violation Increment violation Assessment

*If an increment violation is identified on a facility for which emission unit(s) are being evaluated, the contribute from its own emission units must be subtract from the total before making any determination.



Growth



Notes / Cautions / Web links



Notes / Cautions / Web links

NOTE!!

On February 17, 2009, EPA issued a memorandum that the Agency will reconsider former Administrator Johnson's 12/18/08 memo on the scope of the Prevention of Significant Deterioration permitting program.

The Agency will issue a notice requesting public comment on the issues raised in the memo as well as the issues raised in the Environmental Appeals Board opinion regarding the Deseret Power permit. In light of this memorandum the definition above may change in the future. Additionally, as stated in EPA's memorandum, the December 18, 2008 has not stayed the effectiveness of that memorandum.

CAUTION!!

The applicant must submit the screening assessment to the FLMs for review and concurrence. The District will require that the screening AQRV assessment be included in the PSD application if approved by the FLMs.

Web Links

 The relative sensitivities of plants to NO2 can be found in Table 9-6 of EPA's "Air Quality Criteria for Oxides of Nitrogen, Summary of Vegetation Impacts" Volume II, August 1993 (EPA 600/8-91/049bF) Vegetation (Chapter 9) and Soil (Chapter 10)

http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=300056QV.txt.

Animal Chapter (13)

http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30001NI2.txt



Policies



Policies

- Draft PSD Policies
 - Modeling Domain
 - Intermittent Operation
 - Identification of Sources for inclusion in a Cumulative Impact Assessment
 - Monitor Selection
 - Identification of Sources for inclusion in an Increment Assessment
 - Soil & Vegetation (In Progress)



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